

ORIGINAL

ORIGINAL
FILE

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

ORIGINAL
FILE

In the Matter of

Amendment of the Commission's
Rules to Establish New Personal
Communications Services

) GEN Docket No. 90-314
) ET Docket No. 92-100
)
) RM-7140, RM-7175,
) RM-7617, RM-7618,
) RM-7760, RM-7782,
) RM-7860, RM-7977,
) RM-7978, RM-7979,
) RM-7980
)
) PP-35 through PP-40,
) PP-79 through PP-85

RECEIVED

JAN - 8 1993

Reply Comments of dbX Corporation

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

Raymond G. Bender, Jr.
Deborah R. Broughton

Counsel for dbX Corporation

DOW, LOHNES & ALBERTSON
1255 Twenty-third Street, N.W.
Suite 500
Washington, D.C. 20037
(202) 857-2500

January 8, 1993

TABLE OF CONTENTS

SUMMARY	ii
I. Extended Network PCS Would Provide Important Communications Services to Highly Mobile Business and Individual Travelers	2
II. The Potential of PCS Will Not Be Realized If PCS Is Limited to Local and Regional Systems	4
III. The Commission's PCS Licensing Framework Should Include an Allocation for Extended Network PCS to Serve Highly Mobile Users	6
A. A Large Number of Licensees Could Use Spectrum Allocated for Extended Network PCS	6
B. The Commission Should Allocate The Same Amount of Spectrum for Extended Network PCS Operations As It Allocates to Each Local/Regional PCS Licensee	7
C. The Commission Should Designate a Standards Committee to Propose Technical Standards for Extended Network PCS Licensees	9
D. The Commission Should Grant Applications for Extended Network PCS on a First-Come, First-Served Basis and Should Require Applicants to Prove Non-Interference	9
IV. The Commission Should Preempt Certain State and Local Zoning Regulations	11
V. Conclusion	12

SUMMARY

dbX Corporation ("dbX") demonstrates, in these reply comments, that many businesses and individuals would benefit from access to a uniform mobile communications system that would extend beyond local markets and political boundaries to provide services that are nationwide, although not ubiquitous, in nature. dbX further shows that any PCS licensing framework that is limited solely to local or regional markets will restrict the establishment of fully compatible and economical networks for these highly mobile nationwide users. Finally, dbX requests that the Commission accommodate this important segment of the communications market by allocating PCS spectrum for "extended" PCS networks. Specifically, dbX urges the Commission to authorize, for open-entry licensing, fully compatible networks of strategically located, discrete base stations providing PCS at multiple points across the United States.

RECEIVED

JUN - 8 1993

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	GEN Docket No. 90-314
	)	ET Docket No. 92-100
)	
	)	RM-7140, RM-7175,
	)	RM-7617, RM-7618,
Amendment of the Commission's	)	RM-7760, RM-7782,
Rules to Establish New Personal	)	RM-7860, RM-7977,
Communications Services	)	RM-7978, RM-7979,
	)	RM-7980
)	
	)	PP-35 through PP-40,
	)	PP-79 through PP-85

Reply Comments of dbX Corporation

dbX Corporation ("dbX"),^{1/} by its attorneys, hereby submits its reply comments in the above-captioned proceeding concerning the Federal Communications Commission's (the "Commission's") Notice of Proposed Rule Making to establish a regulatory structure for the licensing of personal communications services ("PCS").^{2/}

In these reply comments, dbX demonstrates that many businesses and individuals would benefit from access to a uniform mobile communications system that would extend beyond local markets and political boundaries to provide services that are nationwide, although not ubiquitous, in

1/ dbX is a Florida corporation whose controlling principal is David A. Bayer, a telecommunications entrepreneur with more than twenty years' experience in the mobile communications industry.

2/ Amendment of the Commission's Rules to Establish New Personal Communications Services, 7 FCC Rcd 5676 (1992) (the "Notice").

nature. dbX further demonstrates that any PCS licensing framework that is limited solely to local or even regional geographic markets will restrict the establishment of fully compatible and economical networks for these highly mobile nationwide users. Finally, dbX requests that the Commission accommodate this important segment of the communications market by allocating PCS spectrum for "extended" PCS networks. Specifically, dbX urges the Commission to authorize, for open-entry licensing, fully compatible networks of strategically located, discrete base stations providing PCS at multiple points across the United States.^{3/}

I. Extended Network PCS Would Provide Important Communications Services to Highly Mobile Business and Individual Travelers

In today's highly mobile society, many businesses and individuals would benefit from access to a uniform mobile communications system that would extend beyond local markets and political boundaries to provide services that are nationwide, although not ubiquitous, in nature. By reserving spectrum for Extended Network PCS systems,^{4/} the

^{3/} dbX will refer to this class of PCS service as "Extended Network PCS."

^{4/} As dbX established in its comments in this proceeding, the proposal for Extended Network PCS is amply supported by Commission precedent establishing other nationwide communications services. See Comments of dbX Corporation in GEN Docket No. 90-314 and ET Docket No. 92-100, filed November 9, 1992 (the "dbX Comments") at 7-10.

Commission would foster the development of customized networks for highly mobile users that require a single source of specialized communications services available at discrete locations across the nation.^{5/} The special communications needs of the United States trucking industry illustrate one potential application of Extended Network PCS.^{6/}

Chairman Sikes recently recognized the benefits that customized networks, such as one designed to meet the needs of the trucking industry, would provide to U.S. business:

Many of these emerging services have the potential to produce substantial productivity gains. To cite another example, companies have proposed special communications networks designed to meet the specific needs of the surface transportation industry -- particularly the long-distance trucking business, for which conventional cellular, satellite, or other existing mobile offerings are not cost-effective. The American trucking industry -- for which there are currently few special communications or radio frequency allocations -- is a \$300 billion a year enterprise, so even modest productivity

^{5/} In order to ensure that Extended Network PCS is used to provide service that is inherently nationwide in character, dbX has recommended that the Commission adopt certain eligibility requirements. See id. at 13-14.

^{6/} Transport Communications (formerly TRX Transportation Telephone Company), an affiliate of dbX, has filed a Request for Pioneer's Preference in the Commission's licensing of PCS for its development of a nationwide communications network to serve the United States trucking industry.

improvements in this sector represent very large national gains.^{7/}

II. The Potential of PCS Will Not Be Realized If PCS Is Limited to Local and Regional Systems

Confining all PCS providers to local or regional markets would prevent the establishment of a fully compatible, effective and economical network for highly mobile business and individual users requiring extended access to uniform services at discrete locations across the nation. Indeed, a licensing scheme restricted to, for example, local MSA and RSA markets, larger, regional areas, such as the 47 Major Trading Areas as defined by Rand McNally, or even a combination of local and regional markets would produce the same disadvantages for PCS users requiring nationwide service that exist today in cellular and other terrestrial mobile communications systems. These disadvantages include the lack of an operationally consistent network; incompatibility of dissimilar infrastructure equipment used in contiguous or proximate markets; unnecessary, burdensome and costly commercial arrangements leading to multiple service subscriptions and high roamer charges which include excessive per minute and access charges and charges for each system utilized; and

^{7/} Statement of Alfred C. Sikes before the Subcommittee on Communications, Committee on Commerce, Science and Transportation, United States Senate, June 3, 1992.

high transactional costs required to consolidate market areas, all of which have led to inefficiencies and delay in bringing affordable mobile services to the marketplace on a truly nationwide basis.

Even if PCS were to permit more technically efficient roaming than that currently provided by cellular, there is no reason to believe that highly mobile users requiring communications services at discrete locations across the nation could obtain such service from local and regional PCS licensees. The locations where such highly mobile users are likely to need service, such as, to cite the Transport Communications proposal, truck stops, rest areas and truck terminals, are typically rural areas where local and regional licensees would be unlikely to provide service either in the near term or possibly ever.

Conversely, reserving spectrum for Extended Network PCS would foster the development of operationally consistent systems that would be easier for highly mobile users to access and use. Allowing a single licensee to provide service at discrete locations across the nation would eliminate the need for highly mobile users to either obtain service from multiple local or regional providers or incur costly roamer charges, neither of which have proved effective solutions for cellular or SMR users. By authorizing Extended Network PCS providers, the Commission

would also ensure the rapid deployment of geographically extensive mobile communications networks.

III. The Commission's PCS Licensing Framework Should Include an Allocation for Extended Network PCS to Serve Highly Mobile Users

In licensing PCS services, the Commission should accommodate highly mobile business and individual users requiring extended access to uniform services at discrete locations across the nation by allocating PCS spectrum for Extended Network PCS. dbX's proposal for open-entry licensing of fully compatible networks of strategically located, discrete base stations providing PCS at multiple points across the United States would stimulate the development of many customized networks, each providing specialized, uniform services to various highly mobile users at many locations across the nation.

A. A Large Number of Licensees Could Use Spectrum Allocated for Extended Network PCS

dbX does not propose the establishment of ubiquitous nationwide PCS systems, and in this respect dbX's proposal differs from those urging the adoption of blanket nationwide licensing. Under dbX's proposal for Extended Network PCS, systems would be designed and licensed principally to serve the needs of highly mobile users such as, for example, those requiring communications services at truck stops, rest areas

and truck terminals throughout the continental United States. Unlike proposals for ubiquitous nationwide licensing, the spectrum allocated for Extended Network PCS operations could be assigned to multiple Extended Network PCS providers. As further described below, dbX suggests that the Commission allocate the same amount of spectrum for Extended Network PCS operations as it allocates to each local/regional PCS licensee. Because Extended Network PCS would consist of large numbers of geographically dispersed base stations providing service to small areas, that spectrum would be available for assignment to a number of Extended Network PCS operators serving various locations across the country. Moreover, the use of spread spectrum technology promises to permit more than one provider to serve essentially the same area using the same portion of spectrum, and technical advances over time are likely to further improve spectrum sharing among Extended Network PCS systems. Including an Extended Network PCS authorization in the PCS licensing framework, therefore, would promote the efficient use of scarce PCS spectrum.

B. The Commission Should Allocate The Same Amount of Spectrum for Extended Network PCS Operations As It Allocates to Each Local/Regional PCS Licensee

In the Notice, the Commission tentatively concluded that 30 MHz of spectrum should be assigned to each

local/regional PCS licensee.^{8/} Numerous commenters have argued for local/regional allocations of something other than 30 MHz, especially for allocations of 20 MHz.

In its comments in this proceeding, dbX supported the allocation of 30 MHz of spectrum for Extended Network PCS operations.^{9/} If the Commission is persuaded, however, to allocate something other than 30 MHz to local/regional PCS licensees, dbX believes that the Commission should make an equivalent allocation for Extended Network PCS operations. For example, if the Commission were to allocate 20 MHz to each of a number of local/regional PCS licensees, dbX believes that the Commission should allocate 20 MHz of spectrum for Extended Network PCS operations.

Such equivalent allocations would permit the compatibility and operational and economic harmonization of fixed station and customer premises equipment for local/regional PCS and Extended Network PCS licensees. Such compatibility would be crucial to Extended Network PCS end users who would want to use their customer premises equipment in both environments and beneficial to all PCS end users who would profit from the accelerated availability of affordable PCS services. This compatibility would permit longer production runs in the manufacturing of PCS

8/ Notice at 5691.

9/ See dbX Comments at 10-12.

equipment. The economies of scale created by longer production runs would reduce the cost of PCS equipment, enabling local/regional PCS and Extended Network PCS licensees to provide more affordable services.

C. The Commission Should Designate a Standards Committee to Propose Technical Standards for Extended Network PCS Licensees

dbX urges the Commission to designate a standards committee, such as the Institute of Electrical and Electronic Engineers, that would periodically propose, for Commission ratification, technical standards for Extended Network PCS licensees.^{10/} Licensees of Extended Network PCS would be required to conform their systems, within one year of the Commission's adoption of the recommendations, to the ratified technical specifications. This continuing duty to periodically upgrade Extended Network PCS systems would ensure that spectrum allocated to Extended Network PCS would be continuously utilized efficiently.

D. The Commission Should Grant Applications for Extended Network PCS on a First-Come, First-Served Basis and Should Require Applicants to Prove Non-Interference

dbX proposes that the Commission adopt a licensing scheme whereby otherwise acceptable applications for

^{10/} See id. at 12.

Extended Network PCS would be granted on a first-come, first-served basis. Applications would be published in the Commission's public notices and would be subject to a 30 day period for filing petitions to deny.

dbX further recommends that applicants be required to submit an engineering demonstration proving that their proposals would not cause harmful interference to existing Extended Network PCS facilities or to facilities proposed in earlier-filed applications for Extended Network PCS. This requirement, combined with the first-come, first-served treatment of applications, would ensure that no application would be denied because of spatial overlap with prior-filed applications. If multiple applications are filed on the same day and propose to use the same portion of spectrum to serve essentially the same geographic area, the Commission would grant all such applications with a condition that each applicant must coordinate its system so that it causes no harmful interference to any other such applicant. This process would mean that no two applications for Extended Network PCS would be mutually exclusive.

IV. The Commission Should Preempt Certain State and Local Zoning Regulations

As it has done with satellite earth stations,^{11/} the Commission should preempt certain state and local zoning regulation of Extended Network PCS base stations. The Commission has recognized that such federal preemption may be necessary to ensure that non-federal regulations do not frustrate the federal interest in promoting interstate communications.^{12/} As dbX demonstrated in its comments in this proceeding,^{13/} the vast number of base stations to which Extended Network PCS licensees would require access make these concerns at least as relevant to Extended Network PCS as they are to satellite earth stations.

The Commission should not allow restrictive and burdensome local and state zoning regulations to stall the development of Extended Network PCS. Because such regulations would frustrate the Commission's attempts to bring the substantial benefits of Extended Network PCS to American consumers and businesses, the Commission should preempt state and local zoning regulation of Extended Network PCS base stations. Because cellular licensees have

^{11/} Preemption of Local Zoning Regulations of Receive-Only Satellite Earth Stations, 51 Fed. Reg. 5519 (1986).

^{12/} See id. at 5522.

^{13/} See dbX Comments at 18-20.

had, and regional PCS licensees will have, similar difficulties,^{14/} dbX further recommends that the Commission preempt state and local zoning regulation of both cellular and regional PCS base stations as well.

V. Conclusion

dbX urges the Commission to incorporate the foregoing proposals into the PCS regulatory structure. The adoption of these proposals is crucial to the rapid introduction of advanced PCS services to highly mobile members of the public.

Respectfully submitted,

dbX Corporation



Raymond G. Bender, Jr.
Deborah R. Broughton

Its Counsel

DOW, LOHNES & ALBERTSON
1255 Twenty-third Street, N.W.
Suite 500
Washington, D.C. 20037
(202) 857-2500

January 8, 1993

^{14/} See id. at 18-20.